Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Conservation and protection of habitats which are important and/or intact: "saving the best."**	**Goal 1:** Conserve important and/or intact habitats and stabilize the loss of habitat across the range. [*Cross Reference with Habitat Conservation and Land Use Goals & Objectives.]*	
Habitat Conservation and Land Use	**Conservation and protection of habitats which are important and/or intact: "saving the best."**	**Goal 1:** Conserve important and/or intact habitats and stabilize the loss of habitat across the range. [*Cross Reference with Habitat Conservation and Land Use Goals & Objectives.]*	**Objective 1.2 (**mid-term): Protect quality sage-grouse habitat from wildfire, invasive species, pinyon/juniper succession, improper livestock grazing practices, urban encroachment, roads & transmission lines, tall structures, and energy development.
Habitat Conservation and Land Use	**Conservation and protection of habitats which are important and/or intact: "saving the best."**	**Goal 1:** Conserve important and/or intact habitats and stabilize the loss of habitat across the range. [*Cross Reference with Habitat Conservation and Land Use Goals & Objectives.]*	**Objective 1.3** (long-term): Ensure that management practices and policies are geared toward maintaining or recovering sagebrush steppe habitat. This includes post-treatment management.
Habitat Conservation and Land Use	**Conservation and protection of habitats which are important and/or intact: "saving the best."**	**Goal 1:** Conserve important and/or intact habitats and stabilize the loss of habitat across the range. [*Cross Reference with Habitat Conservation and Land Use Goals & Objectives.]*	**Objective 1.4:** Establish monitoring program, protocols, and methods to evaluate status and trend of important habitats identified under objective 1 at the site and range-wide scales.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 1:** Develop a comprehensive and range-wide list of invasive species which degrade sage-grouse habitats.	**Objective 1.1:** Identify and prioritize invasive species that pose the greatest risk by December 2007.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 1:** Develop a comprehensive and range-wide list of invasive species which degrade sage-grouse habitats.	**Objective 1.2:** Review and recommend modification of State and Province noxious species lists to fund control measures of invasive species of concern by December 2008.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 2:** Identify and map the threat of invasive species within greater sage-grouse habitats.	**Objective 2.1:** Develop and apply range-wide models for the seven geographic subdivisions in the Sagebrush biome (e.g., spread vector analysis) to provide spatial estimates of the current and future risk of top priority invasive plant species by 2009 (short-term objective).
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 2:** Identify and map the threat of invasive species within greater sage-grouse habitats.	**Objective 2.2:** Develop range-wide and geographic zone maps of the current distribution of invasive plant species and compatible across different state or provincial boundaries by 2009-10 (Short-term objective).
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 2:** Identify and map the threat of invasive species within greater sage-grouse habitats.	**Objective 2.3:** For range-wide efforts, develop and implement site-specific detection surveys and protocols to maximize the likelihood of finding new patches of invasive plant species before they expand. By 2008 (Short-term objective).
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 3:** Identify knowledge gaps and develop guidelines for control of invasive plant species within greater sage-grouse habitat.	**Objective 3.1:** Create methods to prioritize invasive species control on the basis of sagebrush habitat recovery potential in critical Sage-grouse range by 2008. (Short-term objective).

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 3:** Identify knowledge gaps and develop guidelines for control of invasive plant species within greater sage-grouse habitat.	**Objective 3.2:** Compile and/or identify, and implement, integrated invasive species control methods for the 7 geographic subdivisions in the Sagebrush biome by 2008 (e.g., grazing, mowing, seeding, herbicides) (short-term objective).
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 3:** Identify knowledge gaps and develop guidelines for control of invasive plant species within greater sage-grouse habitat.	**Objective 3.3:** Compile and/or identify, and implement, beneficial management practices to minimize negative impacts of invasive species control methods in objective #2 on greater sage-grouse populations and their habitats (e.g., do not conduct any vegetation treatments during nesting and early-brood rearing periods when sage-grouse are present) by 2008.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 4:** Reduce the risk of new infestations of invasive species in greater sage-grouse habitat.	**Objective 4.1:** Compile and/or identify, and implement, guidelines for containment of existing infestations (e.g., border spraying, planting barriers of aggressive plants, grazing to minimize seed production) by 2008.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 4:** Reduce the risk of new infestations of invasive species in greater sage-grouse habitat.	**Objective 4.2**: Compile and/or identify, and implement, beneficial management practices pertinent to domestic livestock and wildlife that will minimize the spread of invasive species by 2008.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 4:** Reduce the risk of new infestations of invasive species in greater sage-grouse habitat.	**Objective 4.3:** Compile and/or identify, and implement, beneficial management practices pertinent to access, vehicles, and equipment that will minimize the spread of invasive species by 2008.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 4:** Reduce the risk of new infestations of invasive species in greater sage-grouse habitat.	**Objective 4.4:** Develop and implement plans for areas treated for invasive species incorporating a seed mixture appropriate for the soils, climate, and landform of the area to ensure recovery of the ecological processes and habitat features of the potential natural vegetation, and to prevent the re-invasion of undesirable species. COORDINATE WITH RESTORATION SUBCOMMITTEE.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 4:** Reduce the risk of new infestations of invasive species in greater sage-grouse habitat.	**Objective 4.5:** Anticipate infestations of new invasive species and educate to target and prevent establishment, now to forever!
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 5:** Integrate and coordinate invasive species management throughout greater sage-grouse habitat to increase effectiveness. COORDINATE WITH INTEGRATION SUBCOMMITTEE.	**Objective 5.1:** Develop partnerships among regional public and private land management entities to develop and implement identified objectives by 2008

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 5:** Integrate and coordinate invasive species management throughout greater sage-grouse habitat to increase effectiveness. COORDINATE WITH INTEGRATION SUBCOMMITTEE.	**Objective 5.2:** Solicit involvement of local weed management specialists, private landowners, wildlife biologists, and range ecologists to share knowledge and develop response plans for invasive species by 2008.
Habitat Conservation and Land Use	**Invasive Plant Species**	**Goal 5:** Integrate and coordinate invasive species management throughout greater sage-grouse habitat to increase effectiveness. COORDINATE WITH INTEGRATION SUBCOMMITTEE.	**Objective 5.3:** Supplement existing invasive species control programs with materials specific to the benefits of proactive management within sage grouse habitats (including weed identification, mechanisms for invasion and dissemination of invasive species, and methods of treating) by 2008.
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.1:** Use scientific data and historic information to establish baseline information (e.g. Ecological Site Descriptions) when evaluating soil quality and ecological processes in sage grouse habitats.
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.2:** Use WAFWA habitat guidelines where achievable considering Ecological Site Descriptions and rangeland health standards to implement flexible and appropriate grazing management systems (season of use, grazing duration, kind of livestock, and stocking intensity).

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.3:** Develop and/or adopt a consistent monitoring program that address effects of grazing management systems and show trends over time. In addition to monitoring progress towards achieving the WAFWA guidelines, monitor the response of vegetation (vigor and production), and the compositional diversity of species. Use monitoring methods that are best suited to the type of grazing management being practiced at a site.
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.4:** Encourage the coordination of landscape management activities on private, federal, state and tribal lands to provide yearlong benefits to sage grouse.
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.5:** Offer incentives when and where appropriate to achieve sage grouse habitat objectives.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Livestock Grazing**	**Goal 1:** Manage grazing to maintain the soil quality and ecological processes necessary for a properly functioning sagebrush community that addresses the long-term needs of sage grouse and other sagebrush associated species.	**Objective 1.6:** Review current land management agencies' grazing programs to ensure consistency and compatibility with the Comprehensive Strategy.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 1:** Identify where agriculture lands are associated with sage-grouse habitat.	**Objective 1.1:** Identify and prioritize agriculture lands that provide the greatest habitat value for sage-grouse.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 2:** Implement management practices on agriculture lands that protect or minimize harm to sage-grouse.	**Objective 2.1** Encourage spot treatment of weeds instead of whole field/pasture chemical treatment.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 2:** Implement management practices on agriculture lands that protect or minimize harm to sage-grouse.	**Objective 2.2** Provide information and incentives to minimize application of insecticides in hayfields.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 2:** Implement management practices on agriculture lands that protect or minimize harm to sage-grouse.	**Objective 2.3** Provide agricultural producers information and incentives on harvesting techniques that reduce bird mortality.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 2:** Implement management practices on agriculture lands that protect or minimize harm to sage-grouse.	**Objective 2.4** Identify the extent to which agricultural water management and infrastructure contributes to the threat of West Nile virus.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 3:** Adjust incentives to encourage the retention and restoration of sagebrush habitat.	**Objective 3.1** Identify incentives that are counter productive to the retention of sage-grouse habitat.
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 3:** Adjust incentives to encourage the retention and restoration of sagebrush habitat.	**Objective 3.2** Modify and fund existing programs to encourage the retention of sage-grouse habitat (e.g. Grasslands Reserve Program, Landowner Incentive Program) and restoration of sage-grouse habitat (CRP).
Habitat Conservation and Land Use	**Agricultural Lands**	**Goal 3:** Adjust incentives to encourage the retention and restoration of sagebrush habitat.	**Objective 3.3** Prioritize re-enrollment of CRP lands providing habitat or adjacent to existing sage-grouse populations or other sensitive or declining species.
Habitat Conservation and Land Use	**Fences**	**Goal 1:** Summarize or quantify the direct and indirect effects of fences on sage-grouse	**Objective 1.1:** Compile and analyze all known accounts of direct and indirect impacts of fencing on sage grouse and similar species to identify high risk situations.
Habitat Conservation and Land Use	**Fences**	**Goal 2:** Compile all known efforts regarding fence design, siting or modifications that have been used to mitigate the potential effect of fences on sage-grouse.	**Objective 2.1:** Compile and analyze all known anecdotal observations, research and/or case studies regarding fence design, siting and modifications that have been implemented to mitigate the direct and indirect impacts of fencing on sage grouse and similar species.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Fences**	**Goal 3:** Implement and evaluate/monitor the effectiveness of proposed fence design, siting and modifications on mitigation direct and indirect impacts on sage-grouse.	**Objective 3.1** Conduct site specific evaluation of fence designs or modifications proposed to mitigate the direct and indirect impacts on sage-grouse. The site specific locations would be identified under Objective 1.1.
Habitat Conservation and Land Use	**Fences**	**Goal 4.** Disseminate the results of the work conduct under Objectives 1-3.	**Objective 4.1** Publish site-specific fencing best management recommendations regarding design, siting and modifications that demonstrate the greatest potential to mitigate the direct and indirect impacts on sage-grouse.
Habitat Conservation and Land Use	**Fences**	**Goal 4.** Disseminate the results of the work conduct under Objectives 1-3.	**Objective 4.2** Promote and distribute site-specific fencing best management recommendations regarding design, siting and modifications that demonstrate the greatest potential to mitigate the direct and indirect impacts on sage-grouse.
Habitat Conservation and Land Use	**Surface Hydrology**	**Goal 1:** Determine the effects of water management on the sagebrush biome.	**Objective 1.1:** Assess climate records and other available data for selected locations in the sagebrush biome, for extreme precipitation events and runoff events that may have impacted sage-grouse or sagebrush.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Surface Hydrology**	**Goal 1:** Determine the effects of water management on the sagebrush biome.	**Objective 1.2:** Test the hypothesis of how changes in water management can increase the productivity of sagebrush ecosystems and enhance sage-grouse populations. This should include a detailed investigation in strategically-selected sagebrush habitats, to assess the importance of surface water flow (including nutrients and sediments) for the maintenance of sagebrush habitats.
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 1:** Evaluate effects of existing energy corridors and associated facilities on sage-grouse and sagebrush habitat. Potential effects may include habitat fragmentation, providing conduits for spread of invasive species, noise disturbance, etc.	**Objective 1.1:** Review existing research studies and monitoring data for effects of energy corridors and associated facilities on Greater sage-grouse or sagebrush habitat**.**
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 1:** Evaluate effects of existing energy corridors and associated facilities on sage-grouse and sagebrush habitat. Potential effects may include habitat fragmentation, providing conduits for spread of invasive species, noise disturbance, etc.	**Objective 1.2:** Design and conduct additional research and monitoring studies to determine effects of existing and proposed energy corridors and associated facilities on sage-grouse and sagebrush habitat.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 2:** Based on research and monitoring data, develop consistent criteria and management guidelines to locate energy corridors and operate and maintain facilities within energy corridors that cross critical sage-grouse habitat in a manner that minimizes impacts to sage-grouse and sagebrush habitat.	**Objective 2.1:** Develop siting criteria and management guidelines for locating energy corridors and operating facilities within energy corridors to minimize impacts.
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 3:** Cooperatively develop and adopt appropriate mitigation measures and best management practices for constructing new facilities within energy corridors and conducting operation and maintenance activities associated with facilities within energy corridors that will minimize impacts to sage-grouse and sagebrush habitat.	**Objective 3.1:** Develop mitigation measures and best management practices for construction and operation of new facilities within energy corridors.
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 4:** Cooperatively develop and implement appropriate monitoring plans to assess effects of new facilities within energy corridors on sage-grouse and sagebrush habitat and adjust mitigation measures and best management practices based on monitoring results.	**Objective 4.1:** Develop and implement monitoring plans to measure effects of facilities within energy corridors on sage-grouse and sagebrush habitats.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Infrastructure: Energy Corridors**	**Goal 4:** Cooperatively develop and implement appropriate monitoring plans to assess effects of new facilities within energy corridors on sage-grouse and sagebrush habitat and adjust mitigation measures and best management practices based on monitoring results.	**Objective 4.2:** Adjust mitigation measures and BMPs based on monitoring results.
Habitat Conservation and Land Use	**Infrastructure: Fences**	**Goal 1:** Design, site, or modify fences to avoid, reduce, and where possible, eliminate injuries to and mortality of greater sage-grouse.	**Objective 1.1:** Estimate risk of collisions of greater sage-grouse with fences by fence type (2, 3, 4, 5-strand, sheep-tight, electric, wood or metal posts, etc.).
Habitat Conservation and Land Use	**Infrastructure: Fences**	**Goal 1:** Design, site, or modify fences to avoid, reduce, and where possible, eliminate injuries to and mortality of greater sage-grouse.	**Objective 1.2:** Estimate risk of collisions associated with fence placement where greater sage-grouse may intersect fences (winter, breeding, brooding, etc.).
Habitat Conservation and Land Use	**Infrastructure: Fences**	**Goal 1:** Design, site, or modify fences to avoid, reduce, and where possible, eliminate injuries to and mortality of greater sage-grouse.	**Objective 1.3:** Develop and implement fence design and placement standards to reduce or eliminate injuries and mortalities to greater sage-grouse.
Habitat Conservation and Land Use	**Infrastructure: Fences**	**Goal 1:** Design, site, or modify fences to avoid, reduce, and where possible, eliminate injuries to and mortality of greater sage-grouse.	**Objective 1.4:** Inventory and replace or relocate fences (over time) that are poorly designed or placed so that injuries and mortalities of greater sage-grouse are reduced or eliminated.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 1:** Evaluate effects of existing roads, trails and railroad corridors and associated facilities on sage-grouse and sagebrush habitat. Potential effects may include habitat fragmentation, providing conduits for spread of invasive species, noise disturbance, etc.	**Objective 1.1:** Review existing available published research and monitoring data for effects of roads and railroads sage-grouse, related species, or sagebrush habitat
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 1:** Evaluate effects of existing roads, trails and railroad corridors and associated facilities on sage-grouse and sagebrush habitat. Potential effects may include habitat fragmentation, providing conduits for spread of invasive species, noise disturbance, etc.	**Objective 1.2:** Design and implement additional research and monitoring studies to fill information gaps related to effects of existing and potential roads or railroads on sage-grouse and sagebrush habitat.
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 2:** Develop consistent criteria and management guidelines to locate, construct, maintain, or close roads and railroads, to minimize impacts to sage-grouse and sagebrush habitat.	**Objective 2.1**: Cooperatively develop management guidelines or best management practices for locating, constructing, maintaining, or closing roads, trails, and rail systems.
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 3:** Implement appropriate mitigation measures or best management practices for constructing and maintaining roads and railroads within sagebrush habitat that will minimize impacts to sage-grouse and sagebrush habitat.	**Objective 3.1**: Implement mitigation measures or best management practices for construction and maintenance of new roads and railroads.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 4:** Cooperatively develop monitoring plans to assess effects of roads and railroads and to measure effectiveness of BMPs and mitigation measures in minimizing effects of roads on sage-grouse and sagebrush habitat.	**Objective 4.1:** Develop monitoring plans to measure effectiveness of BMPs and mitigation measures in minimizing effects of roads and railroads on sage-grouse and sagebrush habitats.
Habitat Conservation and Land Use	**Infrastructure: Roads & Railroads**	**Goal 4:** Cooperatively develop monitoring plans to assess effects of roads and railroads and to measure effectiveness of BMPs and mitigation measures in minimizing effects of roads on sage-grouse and sagebrush habitat.	**Objective 4.2:** Adjust mitigation measures and BMPs based on monitoring results.
Habitat Conservation and Land Use	**Infrastructure: Tall Structures**	**Goal 1:** Compile and evaluate existing published research on effects to Greater sage-grouse due to direct impacts of existing tall structures.	**Objective 1.1:** Evaluate adequacy of existing research information to assess or predict potential direct impacts of tall structures.
Habitat Conservation and Land Use	**Infrastructure: Tall Structures**	**Goal 2:** Develop research protocols for conducting new studies to assess direct impacts of tall structures.	**Objective 2.1:** Develop peer reviewed and scientific protocols to assess impacts of tall structures and potential mitigation methods.
Habitat Conservation and Land Use	**Infrastructure: Tall Structures**	**Goal 3:** Develop scientific and consistent siting and Operation & Maintenance (O&M) criteria for “tall structures” in Greater sage-grouse habitat that will minimize negative impacts on Greater sage-grouse.	**Objective 3.1:** Compile existing siting and O&M criteria or conditions in federal, state and local working group plans pertaining to tall structures.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Infrastructure: Tall Structures**	**Goal 3:** Develop scientific and consistent siting and Operation & Maintenance (O&M) criteria for "tall structures" in Greater sage-grouse habitat that will minimize negative impacts on Greater sage-grouse.	**Objective 3.2:** Develop consistent siting guidelines for tall structures.
Habitat Conservation and Land Use	**Infrastructure: Tall Structures**	**Goal 4:** Develop best management practices (BMPs) and appropriate mitigation measures that can be implemented for siting and O&M activities associated with tall structures.	**Objective 4.1:** Cooperatively develop best management practices and appropriate mitigation measures.
Habitat Conservation and Land Use	**Infrastructure: Urban/Exurban Development**	**Goal 1:** Avoid or minimize incursion of urban and exurban development into greater sage-grouse habitats.	**Objective 1.1:** Identify sage-grouse habitats most at risk to urban and exurban development.
Habitat Conservation and Land Use	**Infrastructure: Urban/Exurban Development**	**Goal 1:** Avoid or minimize incursion of urban and exurban development into greater sage-grouse habitats.	**Objective 1.2:** Promote efforts to maintain ecologically sustainable private lands and economically viable ranches in sage-grouse habitats.
Habitat Conservation and Land Use	**Infrastructure: Urban/Exurban Development**	**Goal 1:** Avoid or minimize incursion of urban and exurban development into greater sage-grouse habitats.	**Objective 1.3:** Develop and implement governmental land management agency land tenure policies to acquire, maintain, or enhance greater sage-grouse habitats.
Habitat Conservation and Land Use	**Dispersed Recreation**	**Goal 1:** Manage dispersed recreational activities to avoid, reduce, and where possible, eliminate displacement of greater sage-grouse or negative impacts to sage-grouse habitat.	**Objective 1.1:** Review what is known about impacts of dispersed recreation on greater sage-grouse.

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Dispersed Recreation**	**Goal 1:** Manage dispersed recreational activities to avoid, reduce, and where possible, eliminate displacement of greater sage-grouse or negative impacts to sage-grouse habitat.	**Objective 1.2:** Review what is known about effects of dispersed recreational activities on greater sage-grouse habitat.
Habitat Conservation and Land Use	**Dispersed Recreation**	**Goal 1:** Manage dispersed recreational activities to avoid, reduce, and where possible, eliminate displacement of greater sage-grouse or negative impacts to sage-grouse habitat.	**Objective 1.3:** Develop management practices to avoid, reduce, or eliminate disturbance to or displacement of greater sage-grouse and effects to greater sage-grouse habitat from dispersed recreational activities.
Habitat Conservation and Land Use	**Dispersed Recreation**	**Goal 1:** Manage dispersed recreational activities to avoid, reduce, and where possible, eliminate displacement of greater sage-grouse or negative impacts to sage-grouse habitat.	**Objective 1.4:** Implement management practices to avoid, reduce, or eliminate negative impacts of recreational activities on greater sage-grouse and their habitat.
Habitat Conservation and Land Use	**Non-Renewable Energy**	**Goal 1**: Enhanced Greater Sage-grouse habitats and populations, with assurance of no 'net loss' of habitat or grouse populations, at an appropriate spatial and temporal scale, while providing for non-renewable resource development and utilization.	**Objective 1.1:** Develop no 'net loss' criteria and methods to accurately assess current habitat/population status, potential impacts and mitigation needs (e.g. habitat equivalency, mitigation ratios, mitigation banking), and mechanisms for implementation. *The Framework Team needs to apply across all land uses.*

Issue	Subissue	Goal	Objective
Habitat Conservation and Land Use	**Non-Renewable Energy**	**Goal 1**: Enhanced Greater Sage-grouse habitats and populations, with assurance of no 'net loss' of habitat or grouse populations, at an appropriate spatial and temporal scale, while providing for non-renewable resource development and utilization.	**Objective 1.2:** Synthesize existing and develop new technologies and practices that off-set, reduce and/or minimize disturbance associated with resource recovery activities. Disseminate technologies and practices through a central repository.
Habitat Conservation and Land Use	**Non-Renewable Energy**	**Goal 1**: Enhanced Greater Sage-grouse habitats and populations, with assurance of no 'net loss' of habitat or grouse populations, at an appropriate spatial and temporal scale, while providing for non-renewable resource development and utilization.	**Objective 1.3:** Develop and implement voluntary incentive programs for mitigation
Habitat Restoration	**Conifer Encroachment**	**Goal 1:** Identify and map the threat of encroachment of conifer species within greater sage-grouse habitats.	**Objective 1.1:** Develop, apply, and evaluate models to provide spatial estimates of risk of encroachment of conifer species by 2010.
Habitat Restoration	**Conifer Encroachment**	**Goal 1:** (Short term) Identify and map the current extent and future threat of encroachment of conifer species within greater sage-grouse habitats.	**Objective 1.2:** (Short term) Develop, apply, and evaluate models to provide spatial estimates of risk of encroachment of conifer species by 2010.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Conifer Encroachment**	**Goal 2:** In order to support defensible and well-informed resource management decisions to benefit sage grouse, synthesize information on the habitat relationships of wildlife associated with pinyon-juniper and other conifers (all phases) which have invaded sagebrush habitats.	**Objective 2.1:** (Short term) Initiate a comprehensive synthesis of habitat relationships for plant and animal species of concern (e.g., ferruginous hawk, gray vireo, juniper titmouse, pinyon jay) to define high-quality habitat and identify species needs associated with conifer encroachment by 2008.
Habitat Restoration	**Conifer Encroachment**	**Goal 2:** In order to support defensible and well-informed resource management decisions to benefit sage grouse, synthesize information on the habitat relationships of wildlife associated with pinyon-juniper and other conifers (all phases) which have invaded sagebrush habitats.	**Objective 2.2:** (Short term) Based on information gaps identified under objective 1, initiate research and/or monitoring to fill these gaps about species of concern by 2010.
Habitat Restoration	**Conifer Encroachment**	**Goal 2:** In order to support defensible and well-informed resource management decisions to benefit sage grouse, synthesize information on the habitat relationships of wildlife associated with pinyon-juniper and other conifers (all phases) which have invaded sagebrush habitats.	**Objective 2.3:** (Short term) Incorporate the results of these studies into plans (e.g. LWGs, LUPs, statewide plans, NEPA analyses) to manage conifer encroachment into greater sage-grouse habitat.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Conifer Encroachment**	**Goal 2:** In order to support defensible and well-informed resource management decisions to benefit sage grouse, synthesize information on the habitat relationships of wildlife associated with pinyon-juniper and other conifers (all phases) which have invaded sagebrush habitats.	**Objective 2.4:** (Short term): Initiate research and/or monitoring to understand the effects of management actions on the species of concern and their habitats by 2010
Habitat Restoration	**Conifer Encroachment**	**Goal 3:** Develop and implement control measures for encroaching conifer species within greater sage-grouse habitat.	**Objective 3.1:** (Short term) Identify by 2010 sites of conifer encroachment that still have an understory of sagebrush and native perennial species and treat (this objective may need some work since we said in our goal statement that we would "develop **and implement** control measures"; assign a high priority for treatment since they have higher likelihood of successful rehabilitation than areas where the sagebrush understory has been depleted.
Habitat Restoration	**Conifer Encroachment**	**Goal 3:** Develop and implement control measures for encroaching conifer species within greater sage-grouse habitat.	**Objective 3.2:** (Short-term) Identify by 2010 former sagebrush sites with a conifer overstory that have a depleted sagebrush and native perennial herbaceous understory; develop specific restoration plans that maximize removal of encroaching species and recovery of sagebrush and associated understory species.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Conifer Encroachment**	**Goal 3:** Develop and implement control measures for encroaching conifer species within greater sage-grouse habitat.	**Objective 3.3:** (Mid term) Initiate research to identify effective integrated treatment methods (e.g., fire, mechanical treatment, herbicides) and apply those methods where appropriate by 2015.
Habitat Restoration	**Conifer Encroachment**	**Goal 3:** Develop and implement control measures for encroaching conifer species within greater sage-grouse habitat.	**Objective 3.4:** (Short term) Based on an evaluation of current practices and guidance, refine and implement guidelines for reducing negative impacts of conifer control activities on greater sage-grouse populations and their habitats by 2007.
Habitat Restoration	**Conifer Encroachment**	**Goal 4:** Develop and implement a long-term monitoring program designed to evaluate the effectiveness of methods to control conifer encroachment into greater sage-grouse habitat.	**Objective 4.1:** (Long term) Develop common protocols and standardized procedures by 2008 for recording treatments and results of monitoring efforts.
Habitat Restoration	**Conifer Encroachment**	**Goal 4:** Develop and implement a long-term monitoring program designed to evaluate the effectiveness of methods to control conifer encroachment into greater sage-grouse habitat.	**Objective 4.2:** (Short term) Develop a rangewide common database by 2007 where managers and researchers can record completed and ongoing pinyon, juniper and other coniferous species removal projects.
Habitat Restoration	**Conifer Encroachment**	**Goal 5:** Integrate and coordinate conifer control efforts within greater sage-grouse habitat to increase effectiveness.	**Objective 5.1:** (Short term) Develop partnerships among regional public and private land management entities by 2008 to develop and implement identified objectives.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Conifer Encroachment**	**Goal 5:** Integrate and coordinate conifer control efforts within greater sage-grouse habitat to increase effectiveness.	**Objective 5.2:** (Short term) Develop and conduct integrated training on the management of conifer encroachment by 2008 (including mechanisms for encroachment, ecological conditions that facilitate encroachment, and methods of treating encroachments).
Habitat Restoration	**Conifer Encroachment**	**Goal 6:** Increase the efficiency/efficacy of conducting conifer removal in greater sage-grouse habitats.	**Objective 6.1** (Mid term): Develop incentives by 2015 for private contractors to remove encroaching conifers to accomplish sage grouse habitat improvement objectives across all land ownerships.
Habitat Restoration	**Conifer Encroachment**	**Goal 6:** Increase the efficiency/efficacy of conducting conifer removal in greater sage-grouse habitats.	**Objective 6.2** (Mid term): Expand and promote incentives for conifer removal on private lands for improving sage grouse habitat
Habitat Restoration	**Conifer Encroachment**	**Goal 6:** Increase the efficiency/efficacy of conducting conifer removal in greater sage-grouse habitats.	**Objective 6.3:** Increase availability of equipment (such as masticators, grinders, chippers) within agencies and to operators by 2009 (see subissue strategy related to planting expertise for specifics).
Habitat Restoration	**Conifer Encroachment**	**Goal 6:** Increase the efficiency/efficacy of conducting conifer removal in greater sage-grouse habitats.	**Objective 6.4** (Short, Mid, and Long term): Promote programmatic integration of wildland fire & fuels management planning and implementation with conifer treatment activities at local, regional, and rangewide scales.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Conifer Encroachment**	**Goal 6:** Increase the efficiency/efficacy of conducting conifer removal in greater sage-grouse habitats.	**Objective 6.5** (Short term): Improve the ability by 2008 of federal agencies to meet their mandates for environmental and archaeological reviews of sites proposed for conifer removal in a timely manner.
Habitat Restoration	**Conifer Encroachment**	**Goal 7:** Streamline procurement and contracting procedures to facilitate timely and effective interagency conifer treatments and other restoration activities.	**Objective 7.1:** Evaluate and modify existing procedures to streamline procurement and contracting and to facilitate seamless interagency programs.
Habitat Restoration	**Conifer Encroachment**	**Goal 7:** Streamline procurement and contracting procedures to facilitate timely and effective interagency conifer treatments and other restoration activities.	**Objective 7.2**: Increase procurement and contracting staffing
Habitat Restoration	**Conifer Encroachment**	**Goal 7:** Streamline procurement and contracting procedures to facilitate timely and effective interagency conifer treatments and other restoration activities.	**Objective 7.3**: Increase trained field staff to serve as contract administrators, inspectors, and contracting officer representatives (COR)
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 1:** Establish a realistic extent (acres and/or percentage of historic) of range that can be restored to support the needs of sage-grouse by December 2006.	**Objective 1.1** (short-term): Standardize a protocol for characterizing the restoration potential of particular habitats that have been degraded.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 1:** Establish a realistic extent (acres and/or percentage of historic) of range that can be restored to support the needs of sage-grouse by December 2006.	**Objective 1.2 (short-term):** Determine area of historic range (acres) that is "unlikely" to be restored without substantial mechanical involvement or cost by 12/2006. Do this in consort with LWGs.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 1:** Establish a realistic extent (acres and/or percentage of historic) of range that can be restored to support the needs of sage-grouse by December 2006.	**Objective 1.3** (short-term): Determine the number of acres or percentage of range that is likely to be restored with adjustments in management, limited mechanical involvement, and/or reasonable cost.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 2:** Ensure that restoration techniques are ecologically sound and attainable.	**Objective 2.1** (short-term): Determine desired future condition: What attributes are we seeking.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 2:** Ensure that restoration techniques are ecologically sound and attainable.	**Objective 2.2** (short-term): Establish a user guide to restoring sagebrush habitats based on information currently available (is this CIRP?).
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 2:** Ensure that restoration techniques are ecologically sound and attainable.	**Objective 2.3** (long-term): Support technical assistance and workshops that demonstrate restoration efforts that worked and did not work.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 2:** Ensure that restoration techniques are ecologically sound and attainable.	**Objective 2.4** (mid-term): Establish a research and monitoring program to evaluate the effectiveness of treatments and management adjustments in meeting restoration goals; include clearinghouse for distributing knowledge from monitoring.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 3:** Restore number of acres or percentage of range from Goal #1 above by the year 2030 (or 2040?).	**Objective 3.1** (short-term): Determine a prioritized list of sites from the exercise in Goal #1 to restore.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 3:** Restore number of acres or percentage of range from Goal #1 above by the year 2030 (or 2040?).	**Objective 3.2** (short term): In consort with LWGs, develop restoration work plan(s) which establishes actions to implement restoration in priority areas. Include, as appropriate, NEPA compliance.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 3:** Restore number of acres or percentage of range from Goal #1 above by the year 2030 (or 2040?).	**Objective 3.3** (long-term): Restore degraded sites on public, private and tribal lands where feasible
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 3:** Restore number of acres or percentage of range from Goal #1 above by the year 2030 (or 2040?).	**Objective 3.4** (long-term): Optimize post-fire restoration efforts so that goals/objectives include restoring sagebrush/sage-grouse habitat needs.
Habitat Restoration	**Range-wide habitat restoration assessment & planning**	**GOAL 4:** Develop and Implement Coordinated and Targeted (enforcement and restoration) restoration efforts across jurisdictional or state boundaries [*Cross Reference with Work Group #3: Integration and coordination across range and jurisdictions, Sub-Issue 4 (Coordinated restoration on broad scale)*]	**Objective 4.1:** Based on work plan described above, coordinate plans across state and regional boundaries.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Native seed availability**	**Goal 1:** Develop a regional assemblage of species that are site adapted and available in quantities needed to implement restoration priority projects/actions. Increase the availability of seed and restoration methods/expertise to restore plant COMMUNITIES, not just individual plant species.	**Objective 1.1 – Research:** Establish regionally-based research programs to develop procedures to grow and produce the desired seed species (crosswalk with science group).
Habitat Restoration	**Native seed availability**	**Goal 1:** Develop a regional assemblage of species that are site adapted and available in quantities needed to implement restoration priority projects/actions. Increase the availability of seed and restoration methods/expertise to restore plant COMMUNITIES, not just individual plant species.	**Objective 1.2 – Define specific species and quantities needed**: determine and develop individual species that will be required and the amount of seed to restore sagebrush habitats identified as having the potential for restoration and the amounts of seed needed on an annual basis (under the previous habitat restoration goal - not just native species, includes site-adapted non-native species).
Habitat Restoration	**Native seed availability**	**Goal 1:** Develop a regional assemblage of species that are site adapted and available in quantities needed to implement restoration priority projects/actions. Increase the availability of seed and restoration methods/expertise to restore plant COMMUNITIES, not just individual plant species.	**Objective 1.3 – Developing and Facilitating Commercially Available Seed:** Develop programs to assure commercial production and availability of individual species (see Idaho seed strategy; SEAM) (surface environment and mining strategy) in the quantities needed to implement restoration projects.

Issue	Subissue	Goal	Objective
Habitat Restoration	**Native seed availability**	**Goal 1:** Develop a regional assemblage of species that are site adapted and available in quantities needed to implement restoration priority projects/actions. Increase the availability of seed and restoration methods/expertise to restore plant COMMUNITIES, not just individual plant species.	**Objective 1.4 – Warehousing and Distribution:** Develop regional seed warehousing or means to supply seed to cooperating users.
Habitat Restoration	**Planting expertise**	**Goal 1:** Plan and conduct research to increase knowledge about restoration methods and their effects in the full range of habitat types and degrees of disturbance.	**Objective 1.1:** Produce and maintain synthesis of research and information about restoration methods and effects
Habitat Restoration	**Planting expertise**	**Goal 1:** Plan and conduct research to increase knowledge about restoration methods and their effects in the full range of habitat types and degrees of disturbance.	**Objective 1.2:** Implement monitoring, research, and development program to test, refine, and apply improved planting techniques.
Habitat Restoration	**Planting expertise**	**Goal 1:** Plan and conduct research to increase knowledge about restoration methods and their effects in the full range of habitat types and degrees of disturbance.	**Objective 1.3:** Design restoration projects to incorporate research questions
Habitat Restoration	**Planting expertise**	**GOAL 2:** Develop the human resources with knowledge and expertise to plan, implement, and monitor treatments to accomplish rangewide restoration goals & priorities.	**Objective 2.1:** Inventory & assess current human resources knowledge & capability (who knows what & where are they located) & identify gaps and priority needs

Issue	Subissue	Goal	Objective
Habitat Restoration	**Planting expertise**	**GOAL 2:** Develop the human resources with knowledge and expertise to plan, implement, and monitor treatments to accomplish rangewide restoration goals & priorities.	**Objective 2.2:** Develop dedicated cadres of restoration specialists at a regional level (consider 7 subregions) to provide on-the-ground technical assistance for planning, implementation, and monitoring.
Habitat Restoration	**Planting expertise**	**GOAL 2:** Develop the human resources with knowledge and expertise to plan, implement, and monitor treatments to accomplish rangewide restoration goals & priorities.	**Objective 2.3:** Provide training to field-level resource agency personnel & partners on current restoration ecology, methods & monitoring techniques.
Habitat Restoration	**Planting expertise**	**GOAL 2:** Develop the human resources with knowledge and expertise to plan, implement, and monitor treatments to accomplish range wide restoration goals & priorities.	**Objective 2.4:** Develop university & vocational programs to train professional restoration specialists as well as on-the-ground practitioners.
Habitat Restoration	**Planting expertise**	**GOAL 2:** Develop the human resources with knowledge and expertise to plan, implement, and monitor treatments to accomplish rangewide restoration goals & priorities.	**Objective 2.5:** Promote private sector capability to provide contract services.
Habitat Restoration	**Planting expertise**	**GOAL 3:** Obtain and manage specialized equipment to meet restoration goals in strategic locations	**Objective 3.1:** Inventory current specialized equipment and compare with projected needs (consider 7 subregions)

Issue	Subissue	Goal	Objective
Habitat Restoration	**Planting expertise**	**GOAL 3:** Obtain and manage specialized equipment to meet restoration goals in strategic locations	**Objective 3.2:** Acquire equipment to address shortages &/or promote private sector inventory & availability.
Habitat Restoration	**Planting expertise**	**GOAL 3:** Obtain and manage specialized equipment to meet restoration goals in strategic locations	**Objective 3.3:** In coordination with the establishment of regional seed warehousing, co-locate equipment in selected strategic locations based on projected restoration project needs.
Habitat Restoration	**Planting expertise**	**GOAL 3:** Obtain and manage specialized equipment to meet restoration goals in strategic locations	**Objective 3.4:** Implement monitoring, research, and development program to test, refine, and apply improved & durable equipment.
Habitat Restoration	**Planting expertise**	**GOAL 4:** Refine and develop mechanism(s) to facilitate rangewide information sharing in a timely and user-friendly manner.	**Objective 4.1:** Produce tools which make best available knowledge accessible and responsive to needs throughout the range (e.g. website, newsletter, symposia, workshops, on-line training, blog, training sessions).
Habitat Restoration	**Planting expertise**	**GOAL 4:** Refine and develop mechanism(s) to facilitate rangewide information sharing in a timely and user-friendly manner.	**Objective 4.2:** Establish a central information clearinghouse for people seeking current knowledge about sage grouse habitat restoration from soup to nuts.
Habitat Restoration	**Planting expertise**	**GOAL 4:** Refine and develop mechanism(s) to facilitate rangewide information sharing in a timely and user-friendly manner.	**Objective 4.3:** Utilize regional restoration cadres for technical assistance & technology transfer.

Issue	Subissue	Goal	Objective
Science, Data, Info	**Standardized vegetation and other data layer base map and access system**	**Goal 1**: Develop a database of information for use in the research and management of issues concerning wildlife species and habitats in the sagebrush ecosystems. Data layers will include vegetation, land cover, land-use, infrastructure, habitat change, wildlife habitat, sage-grouse information, surface geology, and hydrology data.	**Objective 1.1:** Develop a map-based locator on the SAGEMAP website for current and past research and monitoring projects in sagebrush and salt-desert shrub ecosystems.
Science, Data, Info	**Standardized vegetation and other data layer base map and access system**	**Goal 1**: Develop a database of information for use in the research and management of issues concerning wildlife species and habitats in the sagebrush ecosystems. Data layers will include vegetation, land cover, land-use, infrastructure, habitat change, wildlife habitat, sage-grouse information, surface geology, and hydrology data.	**Objective 1.2:** Develop an information-dissemination framework to enable coordinated exchange of sound scientific principles between partners in conservation planning efforts and increase the effectiveness of conservation strategies.
Science, Data, Info	**Standardized vegetation and other data layer base map and access system**	**Goal 1**: Develop a database of information for use in the research and management of issues concerning wildlife species and habitats in the sagebrush ecosystems. Data layers will include vegetation, land cover, land-use, infrastructure, habitat change, wildlife habitat, sage-grouse information, surface geology, and hydrology data.	**Objective 1.3:** Produce data layers appropriate for use in preparing ecoregional assessments. It also will identify primary land uses and changes, potential impacts to sagebrush habitats and associated wildlife, and species of concern that use sagebrush during some part of their life-cycle. Includes the development and maintenance of an updated map of vegetation.

Issue	Subissue	Goal	Objective
Science, Data, Info	**Standardized vegetation and other data layer base map and access system**	**Goal 1**: Develop a database of information for use in the research and management of issues concerning wildlife species and habitats in the sagebrush ecosystems. Data layers will include vegetation, land cover, land-use, infrastructure, habitat change, wildlife habitat, sage-grouse information, surface geology, and hydrology data.	**Objective 1.4:** Develop a natural resource information portal for the sage grouse and sage ecosystems. Our goal is to provide easy access to useful information for land managers, researchers, educators, and the general public.
Science, Data, Info	**Standardized vegetation and other data layer base map and access system**	**Goal**: Develop a database of information for use in the research and management of issues concerning wildlife species and habitats in the sagebrush ecosystems. Data layers will include vegetation, land cover, land-use, infrastructure, habitat change, wildlife habitat, sage-grouse information, surface geology, and hydrology data.	**Objective 1.5:** Share data and information on sagebrush habitat and sage-grouse disease. West Nile Virus (WNV) poses a significant threat to sage grouse populations and possibly other wildlife species in sagebrush ecosystems.
Science, Data, Info	**Definition of success for sage-grouse conservation.**	**Goal 1:** Develop a definition and metrics for success or failure of conservation actions for sage grouse including population estimates	**Objective 1.1:** Produce a synthesis of information on the methods, results, effectiveness, and short-term impacts of sage-grouse habitat improvement projects and other management activities within the sagebrush ecosystem.
Science, Data, Info	**Definition of success for sage-grouse conservation.**	**Goal 1:** Develop a definition and metrics for success or failure of conservation actions for sage grouse including population estimates	**Objective 1.2:** Develop range-wide standards for sustainable sage-grouse populations with sustainable harvest

Issue	Subissue	Goal	Objective
Science, Data, Info	**Definition of success for sage-grouse conservation.**	**Goal 1:** Develop a definition and metrics for success or failure of conservation actions for sage grouse including population estimates	**Objective 1.3:** Determine priorities for which areas to focus conservation actions to maintain the functioning of sagebrush ecosystems.
Science, Data, Info	**Definition of success for sage-grouse conservation.**	**Goal 1:** Develop a definition and metrics for success or failure of conservation actions for sage grouse including population estimates	**Objective 1.4:** Develop an annual region-wide score-card
Science, Data, Info	**Evaluating social and economic effects of human activities on sage grouse and habitat persistence.**	**Goal 1:** Understanding the role of social and economic factors that influence human actions and decisions on the potential persistence of sage grouse and its habitat	**Objective 1.1:** Ascertain cost/benefit analysis of status quo, additional conversions and restoration for rangeland uses as well as rural and urban rangelands towns and cities and counties
Science, Data, Info	**Evaluating social and economic effects of human activities on sage grouse and habitat persistence.**	**Goal 1:** Understanding the role of social and economic factors that influence human actions and decisions on the potential persistence of sage grouse and its habitat	**Objective 1.2**: Determine social benefits of status quo, additional conversions and restoration for rangeland uses as well as rural and urban rangelands towns and cities and counties
Science, Data, Info	**Ability to predict population outcomes/habitat as a result of vegetation change**	**Goal 1:** Development of a tool kit for managers to model habitat to understand and predict sage grouse responses to management actions.	**Objective 1.1**: Develop predictive models for risk assessment and use areas for wildlife species dependent on sagebrush ecosystems
Science, Data, Info	**Ability to predict population outcomes/habitat as a result of vegetation change**	**Goal 1:** Development of a tool kit for managers to model habitat to understand and predict sage grouse responses to management actions.	**Objective 1.2:** Model the cumulative effect of human activities on wildland systems in the western US including the zones of influence of infrastructure features on sage grouse behavior and habitat use.

Issue	Subissue	Goal	Objective
Science, Data, Info	**Ability to predict population outcomes/habitat as a result of vegetation change**	**Goal 1:** Development of a tool kit for managers to model habitat to understand and predict sage grouse responses to management actions.	**Objective 1.3:** Determine multi-scale changes in land cover composition and configuration in sagebrush ecosystems
Science, Data, Info	**Ability to predict population outcomes/habitat as a result of vegetation change**	**Goal 1:** Development of a tool kit for managers to model habitat to understand and predict sage grouse responses to management actions.	**Objective 1.4:** Validate all models to document their effectiveness in predicting outcomes.
Science, Data, Info	**Range-wide research and monitoring collaboration and coordination**	**Goal 1:** The development of an institutional framework to create (above) collaborative effort for funding, research, monitoring and management.	**Objective 1.1:** Provide a framework to encourage data consistency, quality and compatibility
Science, Data, Info	**Range-wide research and monitoring collaboration and coordination**	**Goal 1:** The development of an institutional framework to create (above) collaborative effort for funding, research, monitoring and management.	**Objective 1.2**: Develop a coordinated program of site-specific research and monitoring projects integrated within the context of the landscape
Science, Data, Info	**Range-wide research and monitoring collaboration and coordination**	**Goal 1:** The development of an institutional framework to create (above) collaborative effort for funding, research, monitoring and management.	**Objective 1.3:** Develop a coordinated effort for securing funds for research within the sagebrush ecosystem.
Science, Data, Info	**Range-wide research and monitoring collaboration and coordination**	**Goal 1:** The development of an institutional framework to create (above) collaborative effort for funding, research, monitoring and management.	**Objective 4:** Annual inventory of research and data information needs.

Issue	Subissue	Goal	Objective
Regulatory Mechanisms	**Inconsistent and inadequate application of existing regulations and policies.**	**Goal 1:** Uniformly apply existing regulations, regulatory mechanisms, and policies within and among agencies.	**Objective 1.1**: Complete a comprehensive range-wide analysis within and among agencies to identify inconsistencies and the reasons they occur among federal, provincial, tribal, state, and local governmental entities/agencies (by 31 December 2007).
Regulatory Mechanisms	**Inconsistent and inadequate application of existing regulations and policies.**	**Goal 1:** Uniformly apply existing regulations, regulatory mechanisms, and policies within and among agencies.	**Objective 1.2**: Agencies implement corrective action plans in response to analysis and resolve inconsistencies (by 1 October 2008).
Regulatory Mechanisms	**Adequacy of regulations**	**Goal 1:** Provide a regulatory framework that maintains and enhances Greater Sage-grouse habitat and populations.	**Objective 1.1**: Evaluate the adequacy of existing regulations (by 31 December 2007).
Regulatory Mechanisms	**Adequacy of regulations**	**Goal 1:** Provide a regulatory framework that maintains and enhances Greater Sage-grouse habitat and populations.	**Objective 1.2**: Propose recommendations for regulatory change (by 1 July 2008).
Regulatory Mechanisms	**Adequacy of regulations**	**Goal 1:** Provide a regulatory framework that maintains and enhances Greater Sage-grouse habitat and populations.	**Objective 1.3:** Agency implementation by (1 January 2010).
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Current approaches**	**Goal 1:** Long-term shared leadership and commitment resulting in implementation and evaluation of plans that integrate conservation issues throughout the range.	**Objective 1.1** (short term): Facilitate coordinated, integrated conservation planning across the range.

Issue	Subissue	Goal	Objective
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Current approaches**	**Goal 2:** To insure cumulative effects are addressed (biological and socio-economic) across the range	**Objective 2.1:** To Identify mechanisms to assess and address cumulative effects (biological and socio-economic) across the range.
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Sharing scientific and management information and learning among local working groups and other sage-grouse stakeholders.**	**Goal 1:** Identify barriers and current level and efficacy of information sharing and learning that has occurred between LWGs, and others involved in sage-grouse conservation efforts.	Objective 1.1: Conduct a needs assessment of local working groups
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Sharing scientific and management information and learning among local working groups and other sage-grouse stakeholders.**	**Goal 1:** Identify barriers and current level and efficacy of information sharing and learning that has occurred between LWGs, and others involved in sage-grouse conservation efforts.	**Objective 1.2:** Enhance existing and/ or develop new mechanisms by which information from LWGs and others, could be stored, shared and utilized for shared learning among sage-grouse organizations.
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Inconsistency in policy and coordination across jurisdictional boundaries.**	**Goal 1:** Coordinated policies that enhance sage-grouse conservation efforts at multiple levels.	**Objective 1.1**: Complete an analysis of land management policies and land management plan direction to identify inconsistencies among federal, state, local, provincial, and tribal policies that create barriers that may inhibit sage-grouse conservation.
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Inconsistency in policy and coordination across jurisdictional boundaries.**	**Goal 1:** Coordinated policies that enhance sage-grouse conservation efforts at multiple levels.	**Objective 1.2**: Agencies and LWGs act to resolve inconsistencies that may inhibit sage-grouse conservation.

Issue	Subissue	Goal	Objective
INTEGRATION AND COORDINATION ACROSS RANGE AND JURISDICTIONS	**Inconsistency in policy and coordination across jurisdictional boundaries.**	**Goal 2:** Federal, state, and LWG practices will meet PECE guidelines.	**Objective 2.1**: Federal, state, and LWG demonstrate how elements of the Policy for Evaluation of Conservation Efforts (PECE) of the U.S. Fish and Wildlife Service are being implemented.